

Translating Word Phrases and Speaking Algebraically

ONES TO WATCH!

- When the words more, less, or subtracted from are used the number will come after the operation.

Examples: "5 more than x" = $x + 4$

"6 less than b" = $b - 6$

"8 subtracted from y" = $y - 8$

- When the word quotient is used it typically has and as part of the words. This does not mean addition. It means the numbers or variables are being divided.

Example: "the quotient of x and 2"

$$= \frac{x}{2}$$

- When the word quantity, is used it means that part of the expression is written in parentheses.

Example: "9 times the quantity of a number plus 4"

$$= 9(y + 4)$$

U TRY!

3 more than the quotient of a number and 6 $\frac{x}{6} + 3$

7 subtracted from twice a number $2y - 7$

6 times the quantity of a number minus 5 $6(y - 5)$

5 more than double a number $2x + 5$

8 times the sum of x and 4 $8(x + 4)$

4 less than 9 divided by a number $\frac{9}{x} - 4$

A car travels 55 miles per hour. Write an expression and evaluate (if you can) for how far the car will have travelled:

A) After 3 hours

$$\frac{55(3)}{=165}$$

B) After 5 hours

$$\frac{55(5)}{=275}$$

C) After h hours

$$\frac{55h}{}$$

A plain pizza costs \$7.00. Each topping adds an extra cost of \$0.50. Write an expression and evaluate (if you can) the cost of the pizzas:

A) With one topping

$$\frac{7.00 + .50(1)}{=\$7.50}$$

B) With two toppings

$$\frac{7.00 + .50(2)}{=\$8.00}$$

C) With n toppings

$$\frac{7.00 + .50n}{}$$

) Ted was buying soda for a party. He needs 2 cans of soda per person. Ted is having p number of people at the party.

Write an expression to represent the amount of soda he should buy.

$$\frac{2p}{}$$

If Ted has 98 people attend his party, how many cans of soda should he buy?

$$\frac{2(98)}{=196 \text{ cans}}$$